Run

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        on:
        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
Bd
                                                                                                                                                                                                                                         447
217.8
217.8
216.2
213.8
213.9
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length:
length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-836-960-4
1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441362 seqs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    April 26, 2003, 16:05:14;
                                                                                                                                                                                                                                                                                                         48
28
28
13
13
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
      /cgn2_6/ptodata/l/ina/5A_COMB.seq:*
/cgn2_6/ptodata/l/ina/5B_COMB.seq:*
/cgn2_6/ptodata/l/ina/6B_COMB.seq:*
/cgn2_6/ptodata/l/ina/6B_COMB.seq:*
/cgn2_6/ptodata/l/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/l/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
20000000000
     141
141
141
147
1599
1144
1144
1142
1219
423
423
423
                                                                                                                                                                                                                                                                                                      917
917
947
621
640
641
997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapext 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DВ
2 US-08-951-822-1

US-09-368-951-3

US-09-368-951-6

US-09-368-951-6

US-09-160-221A-1

US-09-160-221A-1

US-09-160-221A-1

US-09-057-880A-3

US-09-057-880A-3

US-09-057-880A-3

US-09-276-531-1

US-09-173-043-29

US-09-135-994-1

543009-1

543009-1

US-08-478-486F-1

US-08-478-486F-2

US-08-478-486F-2

US-08-478-486F-2

US-08-478-486F-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Search time 54 Seconds (without alignments) 8916.343 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                882724
                                                                                                                                                  Sequence 3
Sequence 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                 Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                    Sequence
Sequence
                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                 e 24, Applie 6, Applie 6, Applie 6, Applie 6, Applie 7, 
                                                                                                                                                                                                                                                                                                                                                                   6,62
                                                                                                                                                                                                                                                                                                                                                                                                                    Appli
Appli
                               QΥ
                                                                   DЬ
                                                                                                 Q
                                                                                                                                      망
                                                                                                                                                                QΥ
                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                  ρV
                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                     Matches
                                                                   181
                                                                                                                                      121
                                                                                                                                                                       670
     241
                                  790
                                                                                                                                                                                                      61
```

ALIGNMENTS

```
TYPE: DNA
CORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
COCATION: (1)...(621)
US-08-951-822-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/08951822A

patent No. 5989866

patent No. 5989866

patent No. 5989866

patent Information:

APPLICANT: Deisher, Theresa A.

APPLICANT: Conklin, Darrell C.

APPLICANT: Holdernan, Susan D.

APPLICANT: Hansen, Birgit

APPLICANT: Sheppard, Paul O.

TITLE OF INVENTION: NOVEL FGF HOMOLOGS

FILE REFERENCE: 96-20

CURRENT APPLICATION NUMBER: US/08/951,822A

CURRENT FILING DATE: 1997-10-16

NUMBER OF EEQ ID NOS: 36

SOFTWARE: FASTSEQ for Windows Version 3.0

SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-951-822-1
                                                                                                                                                                                                                                                                                                         550 ATGTATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTACACTTCCTGCTGCTGCTTC
                                                                                                                                                                                                                                  610 CAGGTACAGGTGCTGGTTGCCGAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAG 669
                                                                                                                                                                                                                                                                                       1 ATGTATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTTACACTTCCTGCTGCTGCTGCTTC 60
CAGGTACAGGTGCTGGTTGCCGAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAG
                                                                                                           ACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCCGGCGGCGAGGATGGG
                                                                                                                                                                                                                                                                                                                                                           907;
                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                            51.3%;
91.6%;
                                                                                                                                                                                                                                                                                                                                                        Score 805.2; DB 2;
Pred. No. 1.1e-139;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                           80;
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                     849
                                                                      240
                                                                                                           789
                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                          609
```

2

```
APPLICANT: Consider, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Raymond, Fenella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
CURRENT FILING DATE: 1999-08-05
EARLIER APPLICATION NUMBER: 08/09/368,951
CURRENT FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 917
                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                   Ър
                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                              RESULT 2
US-09-368-951-1
                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                     Sequence 1, Application US/09368951 Patent No. 6352971 GENERAL INFORMATION:
LENGTH:
TYPE: DI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1030
                                                                                                                                                                                                                                                                                                                                  881
                                                                                                                                                                                                                                                                                                                                                                                                                                       761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                               CCAAAGGTTCTGAAAGGAAAAAAAAAAAAAA 1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGGTGATAAGGATTTTATTGTTGACTTGAAACCCCCGATGACAAAAGACTCACGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACTCACACTCCCAGAAAACTGCATCAGAGGAATATTTTTACATGAAAAATAAGGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCGGCCCACACACCCTGCCTAGGCCACCCCGCCGCGGCCCTCAGGTCGCCCTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCAGCCGGAGCTTCAGAAGCCCTTCAAGTACACGACGGTGACCAAGAGGTCCCGTCGG
                                                                                                                                                                                                                                                                                                                                                                                   GTCCCCAGAGGAGGACTTGAATGAGGAAACCAACACTTTGAGAAACCAAAGTCCTTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                GTCCCCAGAGGAGGACTTGAATGAGGAAACCAACACTTTGAGAAGCCAAAGTCCTTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGGACTGTAGTCAACCCACAGGTGCTTGTCTCTCTAGGAACAGACAACTCTAAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTCTATTTTGTACATTGTGTTTAAAAGAAGACAAAAACTGAACCAAAACTCTTGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGGCACCAGCAAGGAGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                             1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1149
                                                                                                                                                                                                                                                                                                                                                                                   880
                                                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
```

```
DЬ
              δÃ
                                                 δÃ
                                                                     Вþ
                                                                                   δõ
                                                                                                         밁
                                                                                                                         Qy
                                                                                                                                             밁
                                                                                                                                                           δÃ
                                                                                                                                                                                 B
                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: CDS
; LOCATION: (1)...(621)
US-09-368-951-1
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Simi
Matches 907;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: HOMO FEATURE:
                 1450
                                                                                       1330
                                                                                                                                                               1210
                                                                                                                                                                                                   1150
                                                                                                                                                                                                                                      1090
                                                                                                                                                                                                                                                                          1030
                                   761
                                                                                                         709
                                                                                                                                             660
                                                                                                                                                                                 601
                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                             970
                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                910
                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                   850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                           730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               670
                                                                                                                                                                                                                                                                                                                                                                                                                       790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
      GTCCCCAGAGGAGGACTTGAATGAGGAAACCAACACTTTGAGAAGCCAAAGTCCTTTTTC
                                                                    GAGGGGTGATAAGGATTTTATTGTTGACTTGAAACCCCCGATGACAAAAGACTCACGCAA
                                                                                                                                            CAGGTACAGGTGCTGGTTGCCGAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAG
GTCCCCAGAGGAGGACTTGAATGAGGAAACCAACACTTTGAGAAACCAAAGTCCTTTTTC
                                                                                                                                                                                ATCCGGCCACACACCCTGCCTAGGCCACCCCGCGCG-CCCTCAGGTCGCCCTGGCCA
                                                                                                                                                                                                                                                       AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                                                                                                                                                                                                                     CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                                                                                                                                                                                                                                                                                                                   AGGGACTGTAGTCAACCCACAGGTGCTTGTCTCTCTCTAGGAACAGACAACTCTAAACTC
                                         AGGGACTGTAGTCAACCCACAGGTGCTTGTCTCTCTCTAGGAACAGACAACTCTAAACTC
                                                                                                                           GCTCTATTTTGTACATTGTGTTTAAAAGAAGACAAAAACTGAACCAAAACTCTTGGGGG
                                                                                                                                                                                                   CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                                                                                                                                                                                                                                               GATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                       GATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                                                  GGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGCTCGTGGGGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                         GGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGCTCGTGGGGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51.3%;
91.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 805.2; DB 4;
Pred. No. 1.1e-139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        917;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                       1389
880
                1509
                                   820
                                                   1449
                                                                                                                           1329
                                                                                                                                                               1269
                                                                                                                                                                                                   1209
                                                                                                                                                                                                                                      1149
                                                                                                                                                                                                                                                                          1089
                                                                      760
                                                                                                                                                                                 659
                                                                                                                                                                                                                                                                                                            1029
                                                                                                                                                                                                                                                                                                                               420
                                                                                                         708
                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  669
                                                                                                                                                                                                                                                                                                                                                969
                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                   909
                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                      849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    609
                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                           789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
```

Qγ

```
APPLICANT: Raymond, Christopher K.
TITLE OF INVENTION: PLASMID CONSTRUCTION BY HOMOLOGOUS
TITLE OF INVENTION: RECOMBINATION
FILE REFERENCE: 97-27
CURRENT APPLICATION NUMBER: US/09/173,043
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: US 60/062,061
EARLIER APPLICATION NUMBER: US 60/062,061
EARLIER FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 34
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 24
LENGTH: 917
                                                                                                                                                                                                                                                              Qy
                                                                    Qy
                                                                                                  В
                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: CDS.
; LOCATION: (1)...(624)
US-09-173-043-24
   В
                      δÃ
                                                  뮍
                                                                                                                   δÃ
                                                                                                                                                Ъ
                                                                                                                                                                                               DP QQ
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
US-09-173-043-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24, Application Patent No. 6207442 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 907; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1090 GGGCAGCCGGAGCTTCAGAAGCCCTTCAAGTACACGACGGTGACCAAGAGGTCCCGTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  550
                                                   481
                                                                                                    421
                                                                                                                          970
                                                                                                                                                  361
                                                                                                                                                                        910
                                                                                                                                                                                                301
                                                                                                                                                                                                                       850
                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                     730
                                                                                                                                                                                                                                                                                                                                         610
                                                                                                                                                                                                                                                                                                                                                                                         GGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGCTCGTGGGGAAGCCC
                                                              AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                 CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                            CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG
                                                                                                                                                                                                                                              GACAAGTATGCCCAGCTCCTAGTGGAGACAGACACCTTCGGTAGTCAAGTCCGGATCAAG
                                                                                                                                                                                                                                                         GACAAGTATGCCCAGCTCCTAGTGGAGACAGACACCTTCGGTAGTCAAGTCCGGATCAAG
                                                                                                                                                                                                                                                                                             ACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCCGCGGCGAGGATGGG
                                                                                                                                                                                                                                                                                                        ACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCCGCGGCGAGGATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTACACTTCCTGCTGCTGTGCTTC 609
                                                 AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09173043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 765.2; DB 4;
Pred. No. 2.4e-132;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                947;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                        1149
                                                                                                                        1029
                                                                                                                                                                        969
                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                        1089
                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                                                                                                                                                  669
                                                540
                                                                                                 480
                                                                                                                                                420
                                                                                                                                                                                                                                                                    849
                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3
```

	729	ACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGGGCTGTACCAGCTCTACAGCCGG .	670	Qy
	120	CARGINCARGINYINGINGCNGARGARAAYGINGAYIIYMGNAIHGAYGINGARAARCAR	61	Db
	669	CAGGTACAGGTGCTGGTTGCCGAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAG	610	Qy
	609	ATGTATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTACACTTCCTGCTGCTGTGCTTC	550	Db Oy
0;	ps	atch 28.5%; Score 447; DB 2; Length 621; cal Similarity 58.1%; Pred. No. 6.3e-74; Ga 360; Conservative 151; Mismatches 109; Indels 0; Ga	Query M Best Lo Matches	7 H.O
		; INAME, ARI: VALIALUI ; LOCATION: (1)(621) ; OTHER INFORMATION: degenerate sequence ; OTHER INFORMATION: n is any nucleotide US-08-951-822-6	LOCAT OTHER OTHER OTHER 08-951	US-
		DNA IISM: Artificial Sequence RRE:	TYPE: ORGAN FEATU	
		RE: FastSEQ for Windows Version 3.0 NO 6 H: 621	SOFTWA	
		08/951,82	CURREN CURREN NUMBER	
		OMOLO	TITLE R	
		ANT: Holderman, Susan D. ANT: Hansen, Birgit	APPLIC APPLIC	
		ANT: Conklin, Darrell C. ANT: Raymond, Fenella ANT: Bukowski, Thomas R.	APPLIC APPLIC	
			Patent SENERAL APPLIC	
		822-6 se 6, Application US/08951822A	SULT 4 ;-08-951 Sequenc	RES US:
	940	CAACACTTTGAGAAACCAAAGTCCTTTTTCCCAAAGGTTCTGAAAAAAAA	881	Db
	1539	CAACACTTTGAAGAAGCCAAAGTCCTTTTTCCCCAAAGGTTCTGAAAGGAAAAAAAA	1480	Qy
	880	CTCTCTCTAGGAACAGACAACTCTAAACTCGTCCCCAGAGGAGGACTTGAATGAGGAAAC	821	дь
	1479	CTCTCTCTAGGAACAGACTCTAAACTCGTCCCCAGAGGAGGACTTGAATGAGGAAAC	1420	Qy
	820	GAAACCCCCGATGACAAAAGACTCACGCAAAAGGGACTGTAGTCAACCCACAGGTGCTTGT	76	Db 5
	760	ATAAGGATTTTATTGTTGACTT	739) Db
	1359	AGACAAAAACTGAACCAAAACTCTTGGGGGGGAGGGGTGATAAGGATTTTATTGTTGACTT	1300	Qy
	738	GAATATTTTTACATGAAAA	720	Db
	1299	GAATATTTTTACATGAAAAATAAGGAAGAAGCTCTATTTTTGTACATTGTGTGTTTAAAAGA	1240	Qy
	719	CCGCCGCGG-CCCTCAGGTCGCCCTGGCCACACTCACACTCCCAGAAAACTGCATCAGAG	661	Db
	1239	CCGCCGCGGCCCTCAGGTCGCCCTGGCCACACTCACACTCCCAGAAAACTGCATCAGAG	1180	Ωу
	660		601	Db
	1179	ATCCGGCCCACACACCCTGCCTAGGCCACC	1150	Qy

```
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Delsher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Bukwaski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Sheppard, Paul O.
CURRENT APPLICATION NUMBER: US/09/368,951
CURRENT APPLICATION NUMBER: US/09/368,951
CURRENT APPLICATION NUMBER: 08/951,822
EARLIER APPLICATION NUMBER: 08/951,822
EARLIER FILING DATE: 1997-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   及
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application Patent No. 6352971 GENERAL INFORMATION:
                                                                                                    Matches
                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 6
                                                                                                                                                                                                                      NAME/KEY: variation
LOCATION: (1)...(621)
OTHER INFORMATION: n
-09-368-951-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -09-368-951-6
                                                                                                                                                                                                                                                                                                                                       FEATURE:
OTHER INFORMATION: degenerate sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1150 ATCCGGCCCACACACCCTGC 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
ATGFATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTTACACTTCCTGCTGCTGTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATHMGNCCNACNCAYCCNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG :| || || : || || :|| :|| :|| :| || :| || :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| :|| 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGCACCAGCAAGGAGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGCTCGTGGGGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCCGCGGCGAGGATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACNWSNGGNAARCAYATHCARGTNYTNGGNMGNMGNATHWSNGCNMGNGGNGARGAYGGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACNMGNGCNMGNGAYGAYGTNWSNMGNAARCARYTNMGNYTNTAYCARYTNTAYWSNMGN
                                                                                              Conservative
                                                                                                                                                                                                                                                                                  (621)
                                                                                                                                                                                                                                                  is any nucleotide
                                                                                                                          28.5%; Score 447; DB 4; 58.1%; Pred. No. 6.3e-74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/09368951
                                                                                           151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                           Mismatches
                                                                                              109;
                                                                                                                                                Length
                                                                                              Indels
                                                                                              0,
                                                                                           Gaps
                                  609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                              0;
```

D Q

80

640

GTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTGAGCCCGTAAG 699

```
DЪ
                     γ
                                                                                              US-09-160-221A-1
                                                                                                                                                                                                                                                                          RESULT 6
US-09-160-221A-1
                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                      CURRENT APPLICATION NUMBER: US/09/160,221A
CURRENT FILING DATE: 198-09-24
NUMBER OF SEQ ID NOS: 14
SOFTWARE: Patentin version 3.0
SEQ ID NO 1
LENGTH: 640
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Hansmann, Douglas
TITLE OF INVENTION: Ultrasound Catheter for Improving Blood Flow to the Heart
FILE REFERENCE: 17515-789
                                                                                                                                                                                                                                                 Sequence 1, Application US/09160221A Patent No. 6312402
                                                          Query Match
Best Local Similarity
                                                Matches
                                                                                                                                                                                                                                                                                                                                                1150
                                                                                                                                                                                                                                                                                                                                                                                              1090
                                                                                                                                                                                                                                                                                                                                                                                                                                          1030
             580 CTGTGTTTACACTTCCTGCTGCTGCTGCTTCCAGGTACAGGTGCTGGTTGCCGAGGAGAAC
                                                                                                                                                                                                                                                                                                                        601 ATHMGNCCNACNCAYCCNGC
                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ب
                                                                                                                                                                                                                                                                                                                                                                                 GGGCAGCCCGGAGCTTCAGAAGCCCTTCAAGTACACGACGGTGACCAAGAGGTCCCGTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTGCTTACAGCTGCTGATTCTCTGCTGTCAAACTCAGGGGGGAGAAT---CACCCGTCT 79
                                                                                                                                                                                                                                                                                                                                             ATCCGGCCCACACACCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                    AARGGNCCNAARACNMGNGARAAYCARCARGAYGTNCAYTTYATGAARMGNTAYCCNAAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGGCCGCGG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                376;
                                                                                                                                                                                                                                                                                                                                                                       GGNCARCCNGARYTNCARAARCCNTTYAARTAYACNACNGTNACNAARMGNWSNMGNMGN
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTACCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTACACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCCGCGGCGAGGATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGGGCTGTACCAGCTCTACAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGTACAGGTGCTGGTTGCCGAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACNWSNGGNAARCAYATHCARGTNYTNGGNMGNMGNATHWSNGCNMGNGGNGARGAYGGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTAYWSNGCNCCNWSNGCNTGYACNTGYYTNTGYYTNCAYTTYYTNYTNYTNTGYTTY
                                             Conservative
                                                          13.9%;
                                                                                                                                                                                                                                                                                                                                               1169
                                                                                                                                                                                                                                                                                                                        620
                                             0;
                                            Score 217.8; |
Pred. No. 7.9e
0; Mismatches
                                                          .9e-32;
                                                                     DB 4;
                                               242;
                                               Indels
                                                                   Length
                                                                      640;
                                             Ψ
                                             Gaps
                      639
                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                          1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   729
                                               1;
```

۲.

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맔
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-462-965A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/08462965A Patent No. 5728546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Greene
              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1060
                                         REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                    SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
SEQUENCE CHARACTERISTICS:
                                                                                                                       CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     700
             TELEPHONE: 201 5. TO NO:
                                                                                                                                                      APPLICATION NUMBER: US/0 FILING DATE: 05-JUN-1995
                                                                                                                                                                                                                                                                                    COUNTRY: US
ZIP: 07068-1739
                                                                                                                                                                                                                                                                                                                   CITY: Roseland
STATE: NJ
                                                                                     REGISTRATION NUMBER: 33,073
                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                             NAME:
                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGCCGCGGCCCCTCAGGTCG 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACACCTTCGGTAGTCAAGTCCGGATCAAGGGCAAGGAGGACGGAATTCTACCTGTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCTGCGGCTGTACCAGCTCTACAGCCGGACCAGTGGGAAACACATCCAGGTCCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACACGACGGTGACCAAGAGGTCCCGTCGGATCCGGCCCACACACCCCTGCCTAGGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGCCCACTTCATCAAGCGCCTCTACCAAGGCCAGCTGCCCTTCCCCAACCACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGTGCATTTCATGAAGCGCTACCCCAAGGGGCAGCCGGAGCTTCAGAAGCCCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGTCTTCACGCGGCAGGGCGGCCCCGCCAGGCTTCCCGCAGGCCGCCAGAACCAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGATCGTGCTGGAGAACAACTATACGGÇCTTCCAGAACGCCCGGCACGAGGGCTGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAAGGTTCTGGAGAACAACTACACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACAAGAGGGGCAAGCTCATCGGGAAGCCCCAGCGGGAAGAGCAAAGACTGCGTGTTCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCGCAAAGGCAAGCTCGTGGGGAAGCCCGATGGCACCAGCAAGGAGTGTGTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACACGTTTGGCAGCCGGGTTCGCATCAAAGGGGGCTGAGAGTGAGAAGTACATCTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTCGCATCTCCGCCACCGCCGAGGACGGCAACAAGTTTGCCAAGCTCATAGTGGAGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCAGGATCAGTGCCCGCGGCGAGGATGGGGGACAAGTATGCCCCAGCTCCTAGTGGAGACA 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGATCCGCGAGTACCAACTCTACAGCAGGACCAGTGGCAAGCACGTGCAGGTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCAGAAGCAGTTCGAGTTTGTGGGCTCCGCCCCCACCCGTCGGACCAAGCGCACACGG
                                                                                                        MULLINS, J.G.
                                                                                                                                                                                                                                                                                                                                                    6 Becker Farm Road
                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen, Craig R.
VENTION: Fibroblast Growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Greene Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gruber Ph.D., Joachim
                                                                                                                                                                                                                                                                                                                                                                Carella, Byrne, Bain,
Stewart & Olstein
                                                                                                                                                                                                                                                                                                                                                                                                                   14
                                                                                                                                                                      US/08/462,965A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              John M.
                                                                            325800-439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                æ
                                                                                                                                                                                                                                                                                                                                                                                  Gilfillan, Cecchi
                                                                          (PF171)
                                                                                                                                                                                                                                                                                                                                                                                                                                Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   759
```

```
LIPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDW-
US-08-462-965A-1

Query M-
Ber
                                                                                                                                                                                                                 RESULT 8
US-09-036-985A-1
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
SOFTWARE: Pa
SEQ ID NO 1
LENGTH: 641
                                                                                                                                                      GENERAL INFORMATION: APPLICANT: Greene
                                                                                                                                                                                   Sequence 1, Application US/09036985A Patent No. 6368822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 376; Conserv
                                                         APPLICANT: Greene et al.
TITLE OF INVENTION: Fibroblast Growth Fact
FILE REFERENCE: PF171D1
CURRENT APPLICATION NUMBER: US/09/036,985A
CURRENT FILING DATE: 1998-03-09
PRIOR APPLICATION NUMBER: 08/462,965
PRIOR FILING DATE: 1995-06-05
                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                         1120
                                                                                                                                                                                                                                                                                                              1180 CCGCCGCGCCCCTCAGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                      1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381 GAGATCGTGCTGGAGAACAACTATACGGCCTTCCAGAACGCCCGGCACGAGGGCTGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       640 GTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTGAGCCGTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  580 CTGTGTTTACACTTCCTGCTGCTGTGCTTCCAGGTACAGGTGCTGGCTTGCCGAGGAGAAC 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141 CAGATCCGCGAGTACCAACTCTACAGCAGGACCAGTGGCAAGCACGTGCAGGTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          700 CAGCTGCGGCTGTACCAGCTCTACAGCCGGACCAGTGGGAAACACATCCAGGTCCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24 CTGTGCTTACAGCTGCTGATTCTCTGCTGTCAAACTCAGGGGGAGAAT----CACCCGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACACGTTTGGCAGCCGGGTTCGCATCAAAGGGGCTGAGAGTGAGAAGTACATCTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGCCCCAGCCCCTCACGTAG
                                                                                                                                                                                                                                                                                                                                                                         TACACGACGGTGACCAAGAGGTCCCGTCGGATCCGGCCCACACACCCTGCCTAGGCCACC 1179
                                                                                                                                                                                                                                                                                                                                                                                                                      GACGTGCATTTCATGAAGCGCTACCCCAAGGGGCAGCCGGAGCTTCAGAAGCCCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGTCTTCACGCGGCAGGGCGCCCGCCAGGCTTCCCGCAGCCGCCAGAACCAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAAGGTTCTGGAGAACAACTACACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACAAGAGGGGCAAGCTCATCGGGAAGCCCAGCGGGAAGAGCAAAGACTGCGTGTTCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCAGGATCAGTGCCCGCGGCGAGGATGGGGGACAAGTATGCCCCAGCTCCTAGTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                       GAGGCCCACTTCATCAAGCGCCTCTACCAAGGCCAGCTGCCCTTCCCCCAACCACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACACCTTCGGTAGTCAAGTCCGGATCAAGGGCAAGGAGACGGAATTCTACCTGTGCATG
                                                                                                                                                                                                                                                                                                                                           AAGCAGAAGCAGTTCGAGTTTGTGGGCTCCGCCCCCACCCGTCGGACCAAGCGCACACGG
                               PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                 Ver.
                                                                                                                                      Fibroblast Growth Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.9%;
                                              14
                               2.1
                                                                                                                                                                                                                                                                                 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 217.8; DB 1;
Pred. No. 7.9e-32;
0; Mismatches 242;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
```

```
US-09-057-860A-3
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                              ρy
                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-036-985A-1
                                                                                                                          Sequence 3, Application US/09057860A Patent No. 6277820 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (3)..(641)
NAME/KEY: mat_peptide
LOCATION: (66)..(641)
NAME/KEY: sig_peptide
LOCATION: (3)..(65)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                       APPLICANT: Weilan Ye
TITLE OF INVENTION: Method Of Dopaminergic And Seratonergi
TITLE OF INVENTION: Neuron Formation From Neuroprogenitor
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                              APPLICANT:
                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                     1180 CCGCCGCGCCCCTCAGGTCG 1200
                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                                           441 ATGGCCTTCACGCGGCAGGGGCGGCCCCGCCAGGCTTCCCGCAGCCGCCAGAACCAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580 CTGTGTTTACACTTCCTGCTGCTGTGCTTCCAGGTACAGGTGCTGGTTGCCGAGGAGAAC 639
             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity es 375; Conserv
                                                                                                                                                                                                                         CGGCCCCAGCCCCTCACGTAG
                                                                                                                                                                                                                                                                                                                                                                                                          TACACGACGGTGACCAAGAGGTCCCGTCGGATCCGGCCCACACACCCTGCCTAGGCCACC
                                                                                                                                                                                                                                                                                                                                     GAGGCCCACTTCATCAAGCGCCTCTACCAAGGCCAGCTGCCCTTCCCCAACCACGCCGAG
                                                                                                                                                                                                                                                                                                                                                            GACGTGCATTTCATGAAGCGCTACCCCAAGGGGCAGCCGGAGCTTCAGAGCCCTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGATCGTGCTGGAGAACAACTATACGGCCTTCCAGAACGCCCCGGCACGAGGGCTGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAGGTTCTGGAGAACAACTACACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACCGCAAAGGCAAGCTCGTGGGGAAGCCCGATGGCACCAGCAAGGAGTGTGTTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACACGTTTGGCAGCCGGGTTCGCATCAAAGGGGGCTGAGAGTGAGAAGTACATCTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACACCTTCGGTAGTCAAGTCCGGATCAAGGGCAAGGAGACGGAATTCTACCTGTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCAGGATCAGTGCCCGCGGCGAGGATGGGGGACAAGTATGCCCAGCTCCTAGTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCTGCGGCTGTACCAGCTCTACAGCCGGACCAGTGGGAAACACATCCAGGTCCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTCGCATCTCCGCCACCGCCGAGGACGGCAACAAGTTTGCCAAGCTCATAGTGGAGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTGAGCCGTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTGCTTACAGCTGCTGATTCTCTGCTGTCAAACTCAGGGGGGAGAAT---CACCCGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
E: Genentech,
1 DNA Way
                                                                                                Mary Hynes
                                                                                                             Arnon Rosenthal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 216.2; DB 4
Pred. No. 1.6e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches 243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           w
``
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       1059
                                                                                                                                                                                                                                                                                                                                                                                           500
                                                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۲,
```

đ

```
밁
                      Ş
                                                       Дb
                                                                                 Ş
                                                                                                               밁
                                                                                                                                        Q
                                                                                                                                                                      망
                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-057-860A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 997 base pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: WinPatin (Genent CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09)
FILING DATE: 09-Apr-1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Svoboda, Craig G.
                           1084
                                                                                    1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inc
                                                                                                                588
                                                                                                                                                                      528
                                                                                                                                                                                                 904
                                                                                                                                                                                                                              468
                                                                                                                                                                                                                                                          844
                                                                                                                                                                                                                                                                                       408
                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          607
                                                                                                                                                                                                                                                                                                                  784
                                                                                                                                                                                                                                                                                                                                               348
                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                            231 CTCCAAGCCCAGGTAACTGTT----CAGTCCTCACCTAATTTTACACAGCATGTGAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    171 GCCATGGGCAGCCCCGCTCCGCGCTGAGCTGCCTGCTGTTGCACTTGCTGGTTCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               547 GCGATGTATTCAGCGCCCTCCGCCTGCACTTGCCTGTGTTTACACTTCCTGCTGCTGCC 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hes 355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 94080
                         CCCAAGGGGCAGC
                                                                                                                                                                                                                                                                                                     CGGACCAGTGGGAAACACATCCAGGTCCTGGGCCGCA---GGATCAGTGCCCGCGGCGAG
CCGCGGGGCCACC
                                                                                                                                                                                                                           GTTCGCGGCGCAGAGACAGGTCTCTACATCTGCATGAACAAGAAGGGGAAGCTAATTGCC
                                                                                                                                                                                                                                             ATCAAGGGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGCTCGTGGGG
                                                       CCCCGCAAGGGCTCCAAGACGCGCCAGCATCAGCGCGAGGTGCACTTCATGAAGCGCCCTG
                                                                                  CCGCGGAAGGGCCCCAAGACCCGGGAGAACCAGCAGGACGTGCATTTCATGAAGCGCTAC
                                                                                                               ACGGCGCTGCAGAACGCCAAGTACGAGGGCTGGTACATGGCCTTTACCCGCAAGGGCCGG
                                                                                                                            ACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAAGAAGGGGCGG
                                                                                                                                                                     AAGAGCAACGGCAAAGGCAAGGACTGCGTATTCACAGAGATCGTGCTGGAGAACAACTAC
                                                                                                                                                                                                AAGCCCGATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGAACAACTAC
                                                                                                                                                                                                                                                                                    GACGGAGACCCCTTCGCGAAGCTCATTGTGGAGACCGATACTTTTGGAAGCAGAGTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGCCTGGTGACGGATCAGCTCAGCCGCCGCCTCATCCGGACCTACCAGCTCTACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGC
                                                                                                                                                                                                                                                                                                                                               CGCACCAGCGGGAAGCACGTGCAGGTCCTGGCCAACAAGCGCATCAACGCCATGGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCCAGGTACAGGTGCTGGTTGCCGAGGAGGAACGTGGACTTCCGCATCCACGTGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              South San Francisco
California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Circular
                           1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inch, 1.44 Mb floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/09/057,860A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 213.8; DB 4; Pred. No. 4.7e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                          1023
                                                                                                                                                                                                                                                         903
                                                      707
                                                                                                               647
                                                                                                                                                                      587
                                                                                                                                                                                                                              527
                                                                                                                                                                                                                                                                                     467
                                                                                                                                                                                                                                                                                                                  843
                                                                                                                                                                                                                                                                                                                                             407
                                                                                                                                                                                                 963
                                                                                                                                                                                                                                                                                                                                                                          783
                                                                                                                                                                                                                                                                                                                                                                                                                                 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         666
                                                                                                                                                                                                                                                                                                                                                                                                      347
                                                                                                                                                                                                                                                                                                                                                                                                                                                            287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    230
```

2

```
엄
                                                                                                     δõ
                                                                                                                                        В
                                                                                                                                                                       Qγ
                                                                                                                                                                                                            В
                               QY
                                                                                                                                                                                                                                            ρy
   밁
                                                                                                                                                                                                                                                                                                                                                         US-09-276-531-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-09-276-531-1
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 295; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09276531 Patent No. 6183968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (650) 845-416
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                       IMMEDIATE SOURCE:
LIBRARY: PROSTUT05
CLONE: 843193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: PA-0008 US TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Lynn E. Murry, Ph.D.
REGISTRATION NUMBER: 42,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Guegler, Karl J.

APPLICANT: Baughn, Mariah R.

TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF GENES ENCODING

TITLE OF INVENTION: RECEPTORS AND PROTEINS ASSOCIATED WITH CELL PROLIFERATION

NUMBER OF SEQUENCES: 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/079,677
FILING DATE: MARCH 27, 1998
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
1077 GGGTTCGCATCAAAGGGGCTGAGAGTGAGAAGTACATCTGTATGAACAAGAGGGGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: CATTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                    836 AAGTCCGGATCAAGGGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAAGGCAAGC 895
                                                                                                                                                                         716 AGCTCTACAGCCGGACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATCAGTGCCC
                                                                                                                                                                                                           897 ACGTGAGGGACCAGGGCGCCATGACCGACCAGCTGAGCAGGCGGCAGATCCGCGAGTACC 956
                                                                                                                                                                                                                               656 ACGTGGAGAACCAGACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGGCTGTACC 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: Herew CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: INCYTE PHARMACEUTICALS, INC STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH:
                                                                                      AACTCTACAGCAGGACCAGTGGCAAGCACGTGCAGGTCACCGGGCGTCGCATCTCCGGCA 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (650) 845-4166
                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yue, Henry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hillman, Jennifer L.
                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Reddy, Roopa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bandman, Olga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Preeti
                                                                                                                                                                                                                                                                                               13.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09/276,531
                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                 Score 211; DB 4; Length 1419; Pred. No. 1.6e-30;
                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                 140;
                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                           775
                                                                    1076
                                                                                                                                                                                                                                                                                 0;
```

```
APPLICANT: Raymond, Christopher K.
TITLE OF INVENTION: PLASMID CONSTRUCTION BY HOMOLOGOUS
TITLE OF INVENTION: RECOMBINATION
FILE REFERENCE: 97-27
CURRENT APPLICATION NUMBER: US/09/173,043
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: US 60/062,061
EARLIER APPLICATION NUMBER: US 50/062,061
EARLIER FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 34
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 29
LENGTH: 141
                                                                                                                                                                                                                                                                                RESULT 12
US-09-173-043-29
; Sequence 29, A
                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11
US-08-951-822-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-951-822-19
                                                                                                                                                                                                                                      Sequence 29, Application US/09173043
Patent No. 6207442
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 19
LENGTH: 141
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/08/951,822A CURRENT FILING DATE: 1997-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: 5' linker sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  896
                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                         691 AGCCGTAAGCAGCTGCGGGCTGTACCAGCTCTACAGCCGG 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          631 GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTG 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43 GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAACTACACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGGTACGTGGGCTTCACCAGA 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGTGGGGAAGCCCGATGGCACCAGCAAGGAGTGTGTGTTCATCGAGAAGGTTCTGGAGA 955
                                                                                                                                                                                                                                                                                                                                                                                      AGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCGCTACCCCAAGG 1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGCTCTACCAAGG 1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGGGCGGCCCCGCCAGGCTTCCCCGCAGCCGCCAGAACCAGCGCGCGAGGCCCACTTCATCA 1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAACTATACGGCCTTCCAGAACGCCCGGCACGAGGGCTGGTTCATGGCCTTCACGCGGC 1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATCGGGAAGCCCAGCGGGAAGAGACAAAGACTGCGTGTTCACGGAGATCGTGCTGGAGA 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.3%;
Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5989866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/08951822A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 99;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2; L:
3.9e-10;
                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

0,;

```
CURRENT FILING DATE: 1999-00-03

EARLIER APPLICATION NUMBER: 08/951,822

EARLIER FILING DATE: 1997-10-16

NUMBER OF 5EQ ID NOS: 36

SOFTWARE: FASTSEQ for Windows Version 3.

SEQ ID NO 19

LENGTH: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                              US-09-135-994-1
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: 5' linker sequence US-09-368-951-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION:
US-09-173-043-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
US-09-368-951-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                      Sequence 1, Application US/09135994A Patent No. 6280938
           APPLICANT: Ranum et al.

TITLE OF INVENTION: SCA7 GENE AND METHODS OF USE
FILE REFERENCE: University of Minnesota
CURRENT APPLICATION NUMBER: US/09/135,994A
CURRENT FILING DATE: 1998-08-18
EARLIER APPLICATION NUMBER: 60/056,170
EARLIER FILING DATE: 1997-08-19
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 96-20
"CURRENT APPLICATION NUMBER: US/09/368,951
CURRENT FILING DATE: 1999-08-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                103 AGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGCCGG
                                                                                                                                                                                                                                                                                                                                                   631 GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTG 690
                                                                                                                                                                                                                                                                                               691 AGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGCCGG 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               691 AGCCGTAAGCAGCTGCGGGCTGTACCAGCTCTACAGCCGG 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 631 GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGAACGCGGGCTCGGGACGATGTG 690
                                                                                                                                                                                                                                                                                                                                43 GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
OF SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGAGAACGTGGACTTCCGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCCGTAAGCAGCTGCGGCTGTACCAGCTCTACAGCCGG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19, Application o. 6352971
                                                                                                                                                                                                                                                                                                                                                                                                              99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
99; Conserv
ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                                                      6.3%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.3%; Scilarity 100.0%; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA linker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         us/09368951
                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 99; DB 4; L
Pred. No. 3.9e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 99;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4; L, 3.9e-10;
                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 141;
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                  102
                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
; SOFTWARE: PatentIn V
; SEQ ID NO 1
; LENGTH: 477
; TYPE: DNA
; ORGANISM: Homo sapi
US-09-135-994-1
                            Вþ
                                                    Qy
                                                                               DЬ
                                                                                                        δÃ
                                                                                                                                    밁
                                                                                                                                                           Ωy
                                                                                                                                                                                       Ъ
                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
5430019-1
                                                                                                                                                                                                                                                                                                                                                     5430019-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;Patent No. 5430019
; APPLICANT: ROGERS, DAVID T.;WOLFMAN, NEIL M.;SEEHRA, JASBIR S.
TITLE OF INVENTION: HOMOGENEOUS K-FGF AND USE OF THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                          ;SEQ ID NO:1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/
FILING DATE: 12-JUN-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                            340
                                                                                 280
                                                                                                           829
                                                                                                                                     220
                                                                                                                                                              769
                                                                                                                                                                                        163
                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                           103
                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     546 AGCG 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      306 CCGCAGCCCCTGCGCCAGCCCGGAGGGCGCAGCGCTCGGGAGGAGCCGCGGGGGGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 438,278 FILING DATE: 16-NOV-1989
                                                                                                                                                                                                                                                                                                                                                               LENGTH: 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
mes 138; Conserv
CTGGAGAACAACTACACGGCCCTGATGTCGGCTAAGTACTCCGGCTGGTACGTGGGCTTC 1008
                           GGCAAGCTCTATGGCTCGCCCTTCTTCACCG----ATGAGTGCACGTTCAAGGAGATTCTC
                                                   CGGGGCGTGGTGAGCATCTTCGGCGTGGCCAGCCGGTTCTTCGTGGCCATGAGCAGCAAG 339
                                                                                                                                                          AGTGCCCGCGGCGAGGATGGGGACAAGTATGCCCCAGCTCCTAGTGGAGACACACCTTC
                                                                                                                                                                                    CGGCGGCTCTACTGCAACGTGGGCATCGGCTTCCACCTCCAGGCGCT----CCCCGACGGC
                                                                                                                                                                                                   CTGTACCAGCTCTACAGCCGGACCAGTGGGAAACACATCCAGGTCCTGGGCCGCAGGATC 768
                                                                                                                                                                                                                                         CCCAAGGAGGCGGCGGTCCAGAGCGGCGCCGGCGACTACCTGCTGGGCATCAAGCGGCTG 162
                                                                                                                                                                                                                                                        CGCATCCACGTGGAGAACCAGACGCGGGCTCGGGACGATGTGAGCCGTAAGCAGCTGCGG 708
                                                                                                        GGTAGTCAAGTCCGGATCAAGGGCAAGGAGACGGAATTCTACCTGTGCATGAACCGCAAA 888
                                                                                                                                   CGCATCGGCGCGCGCGCGCGACACCCGGGGCGACAGCCTGCTGGAGCTCTCGCCCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGCCGCAGGGCGCGCGGAGCGCCCCGGAGCAGCAGTCTGCAGCAGCAGCAGCCG 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                         4.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                              US/07/898,051
                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                           Score 74;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 74.4; DB 4;
Pred. No. 1.6e-05;
                                                                                                                                                                                                                                                                                              Mismatches 175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                            2e-05
                                                                                                                                                                                                                                                                                                                       DB 6;
                                                                                                                                                                                                                                                                                                                       Length 599
                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 477;
                                                                                                                                                                                                                                                                                             6,
                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                   948
                                                                                                                                   279
                                                                                                                                                           828
                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204
                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
δÃ
                               Дδ
397 CTTCCCAACAACTACAACGCCTACGAGTCCTACAAGTACCCCGGCATGTTCATCGCCCTG 456
```

Search completed: April 26, 2003, 17:44:20 Job time: 64 secs

밁

THIS PAGE BLANK (USPTO).